In the Claims:

1. (Previously presented) A method for transmitting data one data packet at a time between at least one receiver operatively connected to at least one transmitter via at least one high-speed link having a plurality of virtual channels, the method comprising the steps of:

the receiver sending a single virtual channel credit packet for a particular virtual channel to the transmitter, said credit packet being indicative that said receiver is available to receive a single data packet and having a unique virtual channel number assigned to said particular virtual channel thereto;

the transmitter responding to said virtual channel credit packet including transmitting a single data packet on said assigned unique virtual channel to the receiver if a data packet is available; and,

the receiver receiving said data packet transmitted from the transmitter.

2. (Previously presented) The method according to claim 1 wherein said virtual channel credit packet is sent when the receiver has the available resources to receive a transmission data packet from the transmitter for said particular virtual channel, and is ready to do so.

3. (Previously presented) The method according to claim 1 wherein said data packet includes said unique virtual channel number assigned to said particular virtual channel.

4. (Original) The method according to claim 1 further comprising the steps of repeating the process for the next virtual channel number until all virtual channels are running.

5. (Previously presented) The method according to claim 1 wherein prior to said step of the receiver sending a virtual channel credit packet, further comprising the steps of:

the receiver checking for available buffer for transmission;

the receiver waiting for a predetermined time if no buffer is available; and,

the receiver sending said virtual channel credit packet for said specific virtual channel once a buffer is available.

6. (Original) The method according to claim 5 wherein said step of the receiver waiting for a predetermined time further comprising the step of the receiver repeating said step of the receiver checking for available buffer step until a buffer is available.

7. (Previously presented) The method according to claim 1 wherein said step of the transmitter responding to said virtual channel credit packet further comprising the steps of:

the transmitter checking for an available buffer for said specific virtual channel;

the transmitter waiting for a predetermined time if no buffer is available; and,

the transmitter looking for said virtual channel credit packet from the receiver if a buffer is available.

8. (Original) The method according to claim 7 wherein said step of the transmitter waiting further comprising the step of the transmitter repeating said step of the transmitter checking for an available buffer until a buffer is available.

9. (Original) The method according to claim 7 wherein said step of the transmitter looking for said virtual channel credit packet further comprising the steps of:

the transmitter waiting for a predetermined time if said virtual channel credit packet is not found; and,

the transmitter checking for available data for transmission if said virtual channel credit packet is found.

10. (Original) The method according to claim 9 wherein said step of the transmitter waiting further comprising the step of the transmitter repeating said step of the transmitter looking for said virtual channel credit packet until said virtual channel credit packet is found.

11. (Previously presented) The method according to claim 9 wherein said step of the transmitter checking for an available data packet further comprising the steps of:

the transmitter waiting for a predetermined time if no data is available; and,

the transmitter sending said data if data is available.

12. (Previously presented) The method according to claim 11 wherein said step of the transmitter waiting further comprising the step of the transmitter repeating said step of the transmitter checking for an available data packet until data is available for transmission.

13. (Previously presented) The method according to claim 11 wherein said step of the transmitter sending said data packet further comprising the step of the transmitter repeating the method according to claim 1 for the next virtual channel credit number.

14. (Previously presented) The method according to claim 1 wherein said step of the receiver receiving said data packet further comprising the steps of:

the receiver checking if said data packet has been received from the transmitter;

the receiver waiting for a predetermined time if said data packet has not been received; and,

the receiver repeating the method according to claim 1 for the next virtual channel number if said data packet has been received.

15. (Previously presented) The method according to claim 14 wherein said step of the receiver waiting further comprising the step of the receiver repeating said step of the receiver checking until said data packet has been received from the transmitter.

16. (Previously presented) A system for transmitting a data packet between at least one receiver operatively connected to at least one transmitter via at least one high-speed link having a plurality of virtual channels, said system comprising:

means for sending a virtual channel credit packet for a particular virtual channel to the transmitter, said credit packet being indicative that said receiver is available to receive a single data packet;

means for responding to said virtual channel credit packet and transmitting a single data packet via said unique virtual channel number to said credit packet sending means;

means for accepting said single data packet from said data packet transmitting means

17. (Previously presented) A system for transmitting a data packet between at least one receiver operatively connected to at least one transmitter via at least one high-speed link having a plurality of virtual channels, said system comprising:

the receiver being adapted to send a single virtual channel credit packet having an assigned unique virtual channel number for a particular virtual channel to the transmitter, said credit packet being indicative that said receiver is available to receive data packets;

the transmitter being adapted to respond to said virtual channel credit packet and transmit a data packet to the receiver;

the receiver being adapted to accept said data packet transmitted from the transmitter;.

18. (Previously presented) A system according to claim 17 wherein said credit packet is further indicative of the receiver having an available buffer of sufficient capacity to receive said single data packet from the transmitter.